

IN THE CLAIMS:

1. (Currently amended) An underground sprinkler with a pop-up head, consisting of a corresponding underground casing, and an upper cylindrical part having a first diameter and a lower cylindrical part having a second diameter, closed by a cover fixed to the pop-up sprinkler head coupled to a piston, [[and pop-ups]] which pops up due to the effect of the water pressure pushing said piston and displaced proportionally to the water pressure, to be recovered by the action of a permanent draw-spring when the [[when the]] water pressure stops, and having respective filtering means, piston guiding and holding means, spray arc and sprinkler head swing control means and means for assembling the sprinkler head, comprising:

a draining and cleaning means for preventing the jamming of [[the sprinkler mechanisms (4)]] a sprinkler mechanism disposed in an intersection of two bodies (230, 231) of the casing (23);

a cover-nut (25) for adjusting [[at a quarter turn]] against said intersection and assembled onto the piston (16), said piston having a smooth tubular cylindrical body, and said cover nut having a fitting means for fitting a respective inlet filter (22) on a lower end thereof;

a closure and anti particle or impurity return filter (22);

[[an upper end of said piston with]] a control means for controlling omega-shaped elements (17) for the spray arc operably disposed at an upper end of said piston;

a stop (29) for [[the]] a catch of the lower body (12) of the sprinkler mechanism (4);

a non-detachable stainless steel shaft (3) for assembling the lower (12) and upper (11) body of the sprinkler (4);

[[a jet breaker element (10)]] an adjustable jet breaker housed within the sprinkler mechanism; and,

a single-piece, plastic, reinforced diffuser blade (7) is pressed on the sprinkler mechanism and it is operable without counterweights.

2. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the draining and cleaning means are are openings (233, 234 and 235) provided on a beveled surface of the intersection (232) [[of both bodies (230, 231) of the casing (23)]] and arranged at 120°.

3. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein [[the special]] cover-nut [[quarter turn fit]] is a part (25) having a cylindrical body (250) [[of]] with a circular plan provided with a superficial rib (251) with bevels (252, 253) on two sides for [[the application of]] applying a special tool for

opening and closing, and [[provided with]] further comprising projecting arcuate wedge-shaped teeth (254) on [[the perimetral]] a peripheral edge and with a slight stepping (256) with the bases for said [[quarter turn]] cover-nut embedding in at least at three points at 120°, and [[it is provided with]] further comprising a central passage (255) for the piston (16), and a circumscribed circular housing (259) on the inside for storing a joint (26) having a profile suitable for fitting to said piston (16), and [[another]] a doughnut-shaped housing (258) for a joint for fitting to the corresponding body (230).

4. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the piston further comprises an externally smooth, tubular cylindrical body (16) having a widened part (160) with a concave curve seating (162) for adapting [[the major]] a base (222) of the purifying filter (22) and a smaller diameter neck (165) on an upper end thereof and provided with several external vertical grooves or ribs (167) for the corresponding adaptation of the omega-shaped elements (17-173) controlling the spray arc.

5. (Currently amended) An underground sprinkler with a pop-up head according to claim 4, [[wherein the vertical grooves or ribs are are]] further comprising vertical grooves

or ribs (167) with an acute triangle profile and [[they are]] equidistantly distributed, preferably at a 60° spacing.

6. (Currently amended) An underground sprinkler with a pop-up head according to claim 4, wherein the purifying filter for the water inlet further comprises a frusto-conical body (22) inverted according to its assembly position, having a closed minor base (220) and another upper, open major base (222) with a perimetral flap (223) for pressure fitting in [[the]] a lower [[conditioned]] part (162) of the piston (16).

7. (Currently amended) An underground sprinkler with a pop-up head according to claim 6, wherein the minor base of the filter further comprises a concentric outer rim (221) which is housed and closed in an inner stepped (238) neck (237) of [[the]] an inlet (236) or an intake of the lower body (230) of the casing (23).

8. (Currently amended) An underground sprinkler with a pop-up head according to claim 5, wherein the omega-shaped elements controlling the spray arc further comprise an annular body (17) projected in two divergent branches (171-172) justifying said omega shape, and [[which internally, on the annular body (17), have]] a triangular toothing (170) internally on the annular body (17) preferably at 114°, which

rotate in a single direction or only clockwise in said grooves or ribs (167) of the upper neck (165) of the piston (16).

9. (Previously presented) An underground sprinkler with a pop-up head according to claim 8, wherein the stop for said omega-shaped elements further comprise a stainless steel wire part (29) in the form of an elongated trapezium having a central opening (290) on the major base, producing two anchors (291-292) which are fixed in a corresponding housing (120) of the lower sector (12) of the sprinkler (4).

10. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the stainless steel shaft for assembling the sprinkler body further comprises a milled space (30) where ~~[[the]]~~ a head (113) of the sprinkler (4) is non-detachably fixed.

11. (Currently amended) An underground sprinkler with a pop-up head according to claim 1, wherein the jet breaker further comprises a controlling screw (10) incorporating a damping spring (101) and which screws into a biased hole (115) provided on a side extension (116) of ~~[[the]]~~ an upper sector (11) of the sprinkler (4), directly facing ~~[[the]]~~ an outlet (110) of the spray nozzle (9).

12. (Previously presented) An underground sprinkler with a pop-up head according to claim 1, wherein the jet diffusing blade further comprises a wide open fork-shaped arm (7) with irregular prismatic rolls on its ends (70-71), without counterweights, and with longitudinal reinforcement ribs (73-74) on both sides of the arm (7).